

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/623,077	TICHY, JAMES B.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Leo Boutsikaris	2872	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed on 7/18/03.
2. ☒ The allowed claim(s) is/are 1-43.
3. ☒ The drawings filed on 03 November 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>7/18/03</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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## **DETAILED ACTION**

### ***Allowable Subject Matter***

Claims 1-43 are allowed.

Claims 1-43 are allowable over the prior art for at least the reason that even though the prior art discloses underwater viewing devices wherein a stream of clear fluid is forcefully disposed in front of the device to displace turbid water, the prior art fails to teach or reasonably suggest, regarding claims 1-34, a viewing enhancing apparatus comprising a fluid-permeable sidewall, the sidewall providing a resistance to flow of the viewing fluid therethrough, the resistance varying according to the position on the sidewall, whereby a chosen velocity profile of the viewing fluid, which enters the supply cavity, passes through the sidewall, passes through the confluence cavity and exits the second housing end, is created when the viewing fluid has exited the second housing end, and regarding claims 35-43, a method for viewing through visibility impaired fluid comprising the steps of coupling a viewing enhancing apparatus to a source of viewing fluid, the apparatus comprising a fluid-permeable sidewall, the sidewall providing a resistance to flow of the viewing fluid therethrough, the resistance varying according to the position on the sidewall, whereby a chosen velocity profile of the viewing fluid, which enters the supply cavity, passes through the sidewall, passes through the confluence cavity and exits the second housing end, is created when the viewing fluid has exited the second housing end, as set forth by the claimed combination.

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Bains (US 4,536,789, Fig. 5), Thomas (US 3,565,516, Fig. 5), Daspit (US 5,678,091, Fig. 2) and Hughes (US 3,838,434, Fig. 2), all disclose underwater viewing devices, or cameras, wherein clear fluid such as water is forcefully sprayed in front of the device. In the above devices, water after passing through some type of channel, such as a tube, is disposed directly in the front area of the device. This is opposite to the claimed device wherein the clear fluid goes through a supply cavity, a sidewall (whose resistance to the passage of the fluid varies locally), and a confluence cavity, before it exits the device. It is the controllable resistance of the passage of the clear fluid through the sidewall that allows for a controllable velocity profile of the clear fluid in the front of the device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Leo Boutsikaris whose telephone number is 571-272-2308.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leo Boutsikaris, Ph.D.  
Primary Patent Examiner, AU 2872  
January 20, 2005

